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PATENT
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<u>Christine M. Colbert</u> Printed name of person mailing correspondence	<u><i>Christine M. Colbert</i></u> Signature of person mailing correspondence

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Alan S. Kopin et al.	Art Unit:	1646
Serial No.:	09/966,871	Examiner:	John D. Ulm
Filed:	September 28, 2001	Customer No.:	21559
Title:	ASSAY FOR IDENTIFYING RECEPTORS HAVING ALTERATIONS IN SIGNALING		

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REPLY TO OFFICE COMMUNICATION

In reply to the Office Communication that was mailed in connection with the above-captioned case on August 8, 2003, Applicants make the following remarks.

This Communication is in response to Applicants' species election made on May 27, 2003. In that election Applicants chose, as species for initial examination, a CCK-A receptor, a Gαq G protein (claim 9) and a Gq5i G protein (claim 25), a somatostatin promoter response element, and a luciferase reporter gene. The Office has taken issue with this election on two grounds: first, that neither Gαq nor Gq5i G proteins are compatible with a somatostatin (SMS) promoter response element, and second that a

CCK-A receptor is not compatible with a Gq5i G protein.

In response to the first objection, the Office is directed to Figure 2 of Applicants' specification, showing that a Gαq G protein does in fact activate the SMS response element. As indicated in the specification at page 22, Figure 2 shows an experiment in which CCK-BR receptors -- that is, receptors coupled to Gαq -- activate a reporter construct having a somatostatin response element linked to a luciferase reporter gene. These results are shown on the left side of Figure 2, labeled "SMS-Luc." These experiments demonstrate that Gαq G proteins (in conjunction with their G protein-coupled receptors) do indeed activate somatostatin response elements.

With respect to Gq5i, Applicants point out that these chimeric G proteins receive signals from Gαi-type receptors and transmit those signals to Gαq response elements. As indicated above, the somatostatin response element is such a Gαq response element. Accordingly, Gq5i is also compatible with the SMS response element. This first basis for the Office's objection to the species election may be withdrawn.

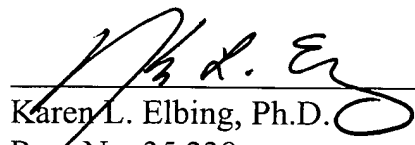
The second basis for the objection is that, while a CCK-A receptor is compatible with a Gαq G protein (claim 9), it is not compatible with a Gq5i G protein (claim 25). In response to this objection, Applicants wish to retain their election of CCK-A for claim 1 (i.e., the independent claim corresponding to claim 9), and to amend their election for claim 23 (i.e., the independent claim corresponding to claim 25). For claim 23, Applicants agree to change the chosen species to mu opioid receptor (SEQ ID NO: 78), a

receptor shown in Applicants' specification at pages 25-26 and in Figure 5 to be compatible with Gq5i.

Enclosed is a Petition to extend the period for responding to this Communication for two months, to and including November 10, 2003 (as November 8, 2003 falls on a Saturday and November 9, 2003 falls on a Sunday). If there are any additional charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

Date: 10 November 2003



Karen L. Elbing, Ph.D.
Reg. No. 35,238

Clark & Elbing LLP
101 Federal Street
Boston, MA 02110
Telephone: 617-428-0200
Facsimile: 617-428-7045